



DEPARTMENT OF WATER RESOURCES
EXAMINATION ANNOUNCEMENT



The Department of Water Resources offers Equal Opportunity for all regardless of race, color, creed, national origin, ancestry, sex, marital status, disability, religious or political affiliation, age, or sexual orientation.

It is an objective of the State of California to achieve a drug-free State workplace. Any applicant for State employment will be expected to behave in accordance with this objective because the use of illegal drugs is inconsistent with the law of the State, the rules governing civil service and the special trust placed in public servants.

HYDROELECTRIC PLANT TECHNICIAN III
OPEN/NON-PROMOTIONAL
FOR BUTTE, CONTRA COSTA, MERCED, KERN,
LOS ANGELES, AND SACRAMENTO COUNTIES

| | | | | |
|---|---|--|-----------|--|
| FINAL FILING DATE | September 25, 2013 Application forms (STD 678 Rev. 6/2010) must be postmarked, emailed or submitted in person , no later than the final filing date. Applications postmarked or personally delivered after the final filing date will not be accepted for any reason. FAXED APPLICATIONS WILL NOT BE ACCEPTED. | | | |
| WHO SHOULD APPLY | Candidates who meet the minimum qualifications as stated below may apply for this examination. | | | |
| HOW TO APPLY | <p>You must submit the Examination Application Form (Form STD 678 Rev. 6/2010) by the final filing date.</p> <p>Examinations will be administered in the following cities: Oroville, Byron, Gustine, Palmdale, Mettler/Bakersfield, or Sacramento. Please indicate on the Examination Application (Form STD 678 Rev. 6/2010), under Question 1, in which county you would like to take the examination.</p> <p>Submit an Examination Application (Form STD 678 Rev. 6/2010) by mail or in person to:</p> <table><tr><td>MAIL: Department of Water Resources P.O. Box 942836 Sacramento, CA 94236-0001</td><td>OR</td><td>SUBMIT IN PERSON: Department of Water Resources 1416 9th Street, Room 320 Sacramento, CA 95814</td></tr></table> <p>For this examination ONLY, emailed applications will be accepted using the following process. Please note, you will be required to sign your application prior to being admitted to the examination.</p> <p>EMAIL:</p> <ol style="list-style-type: none">Download the Examination Application (Form STD 678 Rev.6/2010) http://jobs.ca.gov/pdf/std678.pdfComplete the Examination Application form and save to computer.To submit the application for the examination listed above by email, go to the following web address www.water.ca.gov/jobs/heptechexaminationinstructions.cfm and follow the instructions. | MAIL: Department of Water Resources P.O. Box 942836 Sacramento, CA 94236-0001 | OR | SUBMIT IN PERSON: Department of Water Resources 1416 9th Street, Room 320 Sacramento, CA 95814 |
| MAIL: Department of Water Resources P.O. Box 942836 Sacramento, CA 94236-0001 | OR | SUBMIT IN PERSON: Department of Water Resources 1416 9th Street, Room 320 Sacramento, CA 95814 | | |
| IDENTIFICATION REQUIRED | Accepted applicants are required to bring either a photo identification card or two forms of signed identification to each phase of the examination. | | | |
| SPECIAL TESTING ARRANGEMENTS | If you have a disability and need special testing arrangements, mark the appropriate box in Question 2 of the "Application for Examination". You will be contacted to make specific arrangements. | | | |
| SALARY RANGE | \$5577 – 7065 New Salary will be \$7668 – 9320 (Upon Legislative Approval) | | | |
| ELIGIBLE LIST INFORMATION | Separate open/non-promotional eligible lists will be established for Butte, Contra Costa, Merced, Kern, Los Angeles, and Sacramento Counties for the Department of Water Resources. Eligibility may be established in multiple locations. The list will be abolished 12 months after it is established unless the needs of the service and conditions of the list warrant a change in this period. | | | |
| EXAMINATION DATES | The entire examination will consist of a Qualification Appraisal Interview. It is anticipated that the Qualifications Appraisal interviews will be held during the month of October. | | | |
| REQUIREMENTS FOR ADMITTANCE TO THE EXAMINATION | <p>NOTE: All applicants must meet the minimum qualifications for this examination by the written test date. Qualifying experience may be combined on a proportionate basis if the requirements stated below include more than one pattern and are distinguished as "Either" I, "or" II, "or" III, etc. For example, candidates possessing qualifying experience amounting to 50% of the required time of Pattern I, and additional experience amounting to 50% of the required time of Pattern II, may be admitted to an examination as meeting 100% of the overall experience requirement.</p> <p>Either I</p> <p>Three years of experience in the California state civil service performing the duties of a Hydroelectric Plant Technician II.</p> <p>Or II</p> <p>Four years of journey-level experience performing testing, calibration and maintenance of protections systems, monitoring and control equipment, communications and security systems, metering and sensors similar to those used in generating/pumping plants, switchyards, and water conveyance facilities;</p> <p>AND</p> <p>Education: Completion of an approved two-year (60 semester or equivalent quarter units) technical curriculum in electrical, electronic, mechanical or computer-science technology at the community college level, or equivalent. [Additional electrical, electronic, mechanical, or computer-science work experience in an electrical utility or equivalent industrial or military facility, may be substituted for the required education on the basis of one year of experience being equivalent to 15 semester units.]</p> | | | |
| POSITION DESCRIPTION | <p>The Hydroelectric Plant Technician III is the advanced journey/lead worker level class in the Hydroelectric Plant Technician series. An incumbent works under general direction to lead and perform the most complex preventative and corrective maintenance tasks associated with Supervisory Control and Data Acquisition (SCADA), protection schemes, monitoring and control equipment, communications and security systems, metering, sensors, computerized and related equipment used in State Water Project (SWP) generating/pumping plants, switchyards, and water conveyance facilities; performs shop or field work as needed to install, calibrate, maintain, operate, troubleshoot, repair and test electrical, electronic, and electromechanical equipment and devices; and does other related work as required.</p> <p>Positions exist in the following counties: Butte, Contra Costa, Merced, Kern, Los Angeles, and Sacramento with the Department of Water Resources.</p> | | | |

SEE REVERSE FOR ADDITIONAL INFORMATION

| | |
|-------------------------|---|
| EXAMINATION INFORMATION | The entire examination will consist of a qualifications appraisal interview weighted 100% . In order to obtain a position on the eligible list, a minimum rating of 70% must be attained in the interview. |
| SCOPE OF EXAMINATION | <p style="text-align: center;">Qualifications Appraisal Interview – Weighted 100.00%</p> <p>In addition to evaluating the competitors' relative abilities as demonstrated by quality and breadth of experience, emphasis in the examining interview will be on measuring competitively, relative to job demands, each competitor's:</p> <p>A. Knowledge of:</p> <ol style="list-style-type: none">1. Mathematics, algebra, trigonometry, and Boolean logic to solve electrical and electronic problems.2. Equipment and procedures for testing, inspection, calibration, installation, troubleshooting, maintenance and repair of control systems, communication systems, network systems, security systems, and associated equipment.3. Material, equipment and procedures for testing, maintenance and repair of electrical, electromechanical and electronic devices associated with large generating and pumping plants and switchyards.4. Test equipment and diagnostic devices such as oscilloscopes, multi-meters, counters, power system, logic, and network analyzers to determine, diagnose, and isolate problems or malfunctions in order to make necessary repairs.5. Electronic, electro-mechanical and hydraulic equipment and procedures for testing and measuring flow, vibration, pressure, temperature, speed level, and displacement in hydroelectric and water conveyance facilities.6. Electrical and electronic theory and its application to solve electrical and electronic system problems and to test, maintain and repair electrical and electric equipment.7. Equipment, procedures, safety, and testing requirements for protection systems such as CT, PT, and electromechanical and microprocessor based protective relays.8. Equipment, procedures, safety and testing practices for large-scale distributed supervisory control and data acquisition (SCADA) systems and distributed communication systems.9. Equipment, procedures and testing practices for network and security systems.10. Instrumentation for measuring flow, level, position, temperature, pressure, speed, and vibration.11. Safety, security and reliability practices, federal and state regulatory mandates as related to hydroelectric facilities and high-voltage equipment.12. Safety procedures for working on or around high-voltage equipment, generating/pumping plants, switchyards, and water conveyance systems, including lockout/tag-out procedures.13. Support and maintenance practices for LANs and computer equipment and software for the SWP facilities.14. Technical drawings (ex. one line diagrams, schematics, wiring diagrams and logic diagrams).15. Color code standards for electrical wiring and components used in the manufacture, configuration, and repair of electrical equipment and procedures for testing electrical, electromechanical and electronic devices associated with generating/pumping plants, switchyards, water conveyance systems and facilities.16. Hydroelectric facilities and high-voltage testing such as AC power-factor (Doble), DC insulation resistance (Meggar), and AC and DC high potential testing.17. Hydroelectric plant construction, operation and maintenance.18. Electrical and electronic theory as applied to power and pumping plant equipment.19. Departmental personnel policies to ensure that actions are in compliance.20. Basic principles and practices of personnel management to lead the work of others. <p>B. Ability to:</p> <ol style="list-style-type: none">1. Test, inspect, calibrate, install, troubleshoot, maintain, and repair control systems, communication systems, network systems, and related equipment associated with large generating pumping plants, switchyards and water conveyance facilities.2. Test electrical, electromechanical, and electronic devices associated with large generating pumping plants, switchyards and water conveyance facilities.3. Determine, diagnose, and isolate problems or malfunctions in order to make necessary repairs.4. Install test equipment and make all necessary connections.5. Use mathematics, including algebra, trigonometry and Boolean logic to solve electrical and electronic problems.6. Apply electrical and electronic theory and application to solve electrical and electronic problems and to test, maintain and repair electrical components, equipment and systems.7. Read and interpret technical drawings, documentation and procedures for testing and repairs, and to interpret test results.8. Use a personal computer for standard office applications and specialized troubleshooting.9. Train others to perform various aspects of work (ex. demonstrating proper procedures and techniques and communicating effectively).10. Work in an environment that requires strict adherence to instructions, standards, and procedures.11. Identify potential safety hazards.12. Apply knowledge of existing systems and SWP facilities for the planning of equipment installations or modifications.13. Analyze situations and make recommendations for improvements of performance or reliability of equipment, procedures and practices.14. Wire components and equipment following wiring diagrams, schematics, or connection diagrams.15. Prepare cost estimates and specifications.16. Anticipate material and equipment needs.17. Perform high-voltage insulation tests, performance and efficiency, vibration analysis and infrared scanning of hydroelectric power utility equipment.18. Make accurate judgments regarding the amount of time a particular task or group of tasks will take to complete.19. Project timelines, deadlines and completion dates.20. Set, plan and coordinate various work activities in order to meet deadlines or goals.21. Logically analyze a problem from different perspectives and generate potential solutions that are practical and effective.22. Take apart a problem, asses interrelationships among the parts, and draw logical and feasible conclusions.23. Prioritize and organize work activities of self and others to ensure that all work is completed correctly and in a timely manner.24. Monitor and assess work performed to ensure compliance with Department policy and procedures.25. Plan and direct the work of technicians performing various testing, inspecting, installation and maintenance activities at SWP facilities.26. Work independently without close supervision to perform the duties of the job.27. Comprehend policies, procedures, orders, rules, and other related written documents/materials to perform the duties of the job. |
| SPECIAL CHARACTERISTICS | Legally operate a motor vehicle; pay close attention to detail to ensure the completeness and accuracy of work performed; be able to work as part of a team when necessary, work quickly and accurately in a high pressure work environment; |

SEE NEXT PAGE FOR ADDITIONAL INFORMATION

| | |
|-----------------------------|---|
| SPECIAL REQUIREMENTS | <p>Strength and ability to lift and carry 50 pounds. Ability to ascend stairs and work off a 25 foot ladder. Must possess normal or corrected vision to identify color-coded wire.</p> <p>This is a sensitive position and subject to substance testing.</p> <p>The North American Reliability Corporation (NERC) Critical Infrastructure Protection (CIP) Standard CIP-004 that is part of the Energy Policy Act of 2005 requires the completion of a thorough background investigation. Persons convicted of a felony may not be eligible to compete for or appointed to positions in this class.</p> |
| VETERANS PREFERENCE | <p>Veterans Preference Credit will be added to final score of score of all competitors who are successful in this examination and who qualify for and have requested these points through the California Department of Human Resources. Due to changes in the law effective January 1, 1996, VETERANS WHO HAVE ACHIEVED PERMANENT CIVIL SERVICE STATUS ARE NOT ELIGIBLE TO RECEIVE VETERANS' CREDIT.</p> |

General Information

The Department of Water Resources reserves the right to revise the examination plan to better meet the needs of the service if the circumstances under which this examination was planned change. Such revision will be in accordance with civil service laws and rules and all competitors will be notified.

For an examination with a written feature, it is the candidate's responsibility to contact the Department of Water Resources three days prior to the written test date if he/she has not received his/her notice of appointment.

For any examination without a written feature it is the candidate's responsibility to contact the Selection Services Section of the Department of Water Resources, (916) 653-4838 three weeks after the final filing date if he/she has not received a progress notice.

Applications are available at Department of Water Resources' (DWR) offices, the DWR website: www.water.ca.gov/jobs/currentexams.cfm, local office of the Employment Development Department, and California Human Resources (CalHR) at www.jobs.ca.gov and click "My Profile".

If you meet the requirements stated on the reverse, you may take this examination, which is competitive. Possession of the entrance requirement does not assure a place on the eligible list. All candidates who pass will be ranked according to their scores.

General Qualifications: Candidates must possess essential personal qualifications including integrity, initiative, dependability, good judgment, and ability to work cooperatively with others; and a state of health consistent with the ability to perform the assigned duties of the classification.

Examination Locations: When a written or performance test is part of the examination, it will be given in such places in California as the number of candidates and conditions warrant. Ordinarily, qualifications appraisal interviews are scheduled in Sacramento and Los Angeles. However, locations of interviews may be limited or extended as conditions warrant.

If a candidate's notice of oral interview fails to reach him/her prior to the day of the interview due to a verified postal error, he/she will be rescheduled upon written request.

Eligible Lists: Eligible lists established by competitive examination, regardless of date, must be used in the following order: 1) subdivisional promotional, 2) departmental promotional, 3) multidepartmental promotional, 4) servicewide promotional, 5) departmental open, 6) open eligible list. When there are two lists of the same kind, the older must be used first. Eligible lists will expire in one to four years unless otherwise stated on this bulletin. In the case of continuous testing examinations, names are merged into the appropriate lists in order of final test scores (except as modified by veterans preference credits) regardless of the date of the test, and the resulting eligible lists will be used only to fill vacancies in the area shown on the bulletin.

TDD is Telecommunications Device for the Deaf and is reachable only from phones equipped with a TDD Device. **California Relay Telephone Service** for the Deaf or hearing impaired: From TDD phones: 1-800-735-2929; From Voice phones: 1-800-735-2922.

For information regarding this examination, please contact Selection Services at (916) 653-4838.

O/NP (Rev. 8/13) (BL)